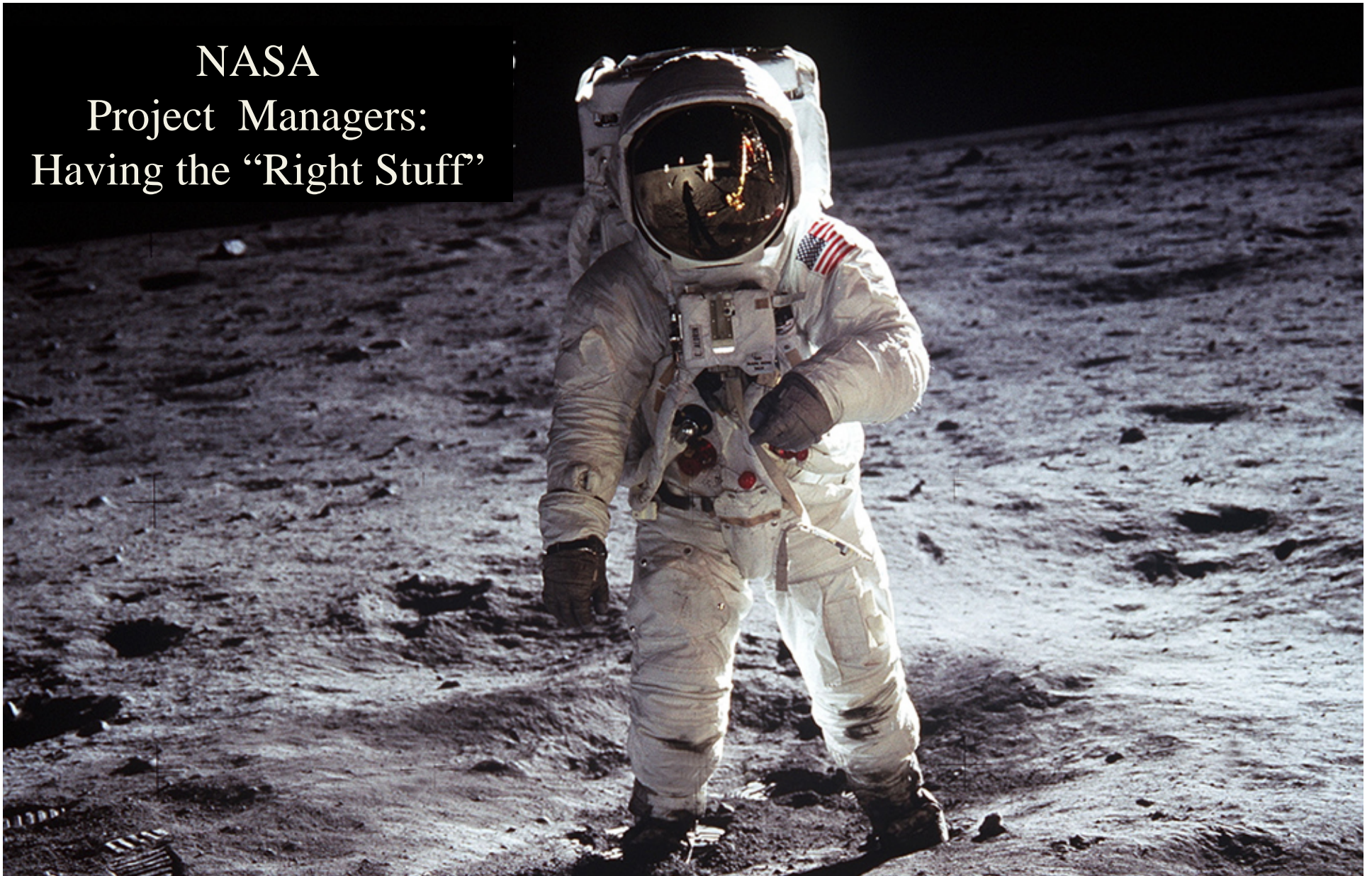NASA
Project Managers:
Having the "Right Stuff"

NASA Project Management Challenge 2006 21-22 March, 2006 Galveston, Texas

Dr. Jerry Mulenburg   PMP   NASA Ames Research Center   gmulenburg@mail.arc.nasa.gov

*Winning Project Managers are Essential
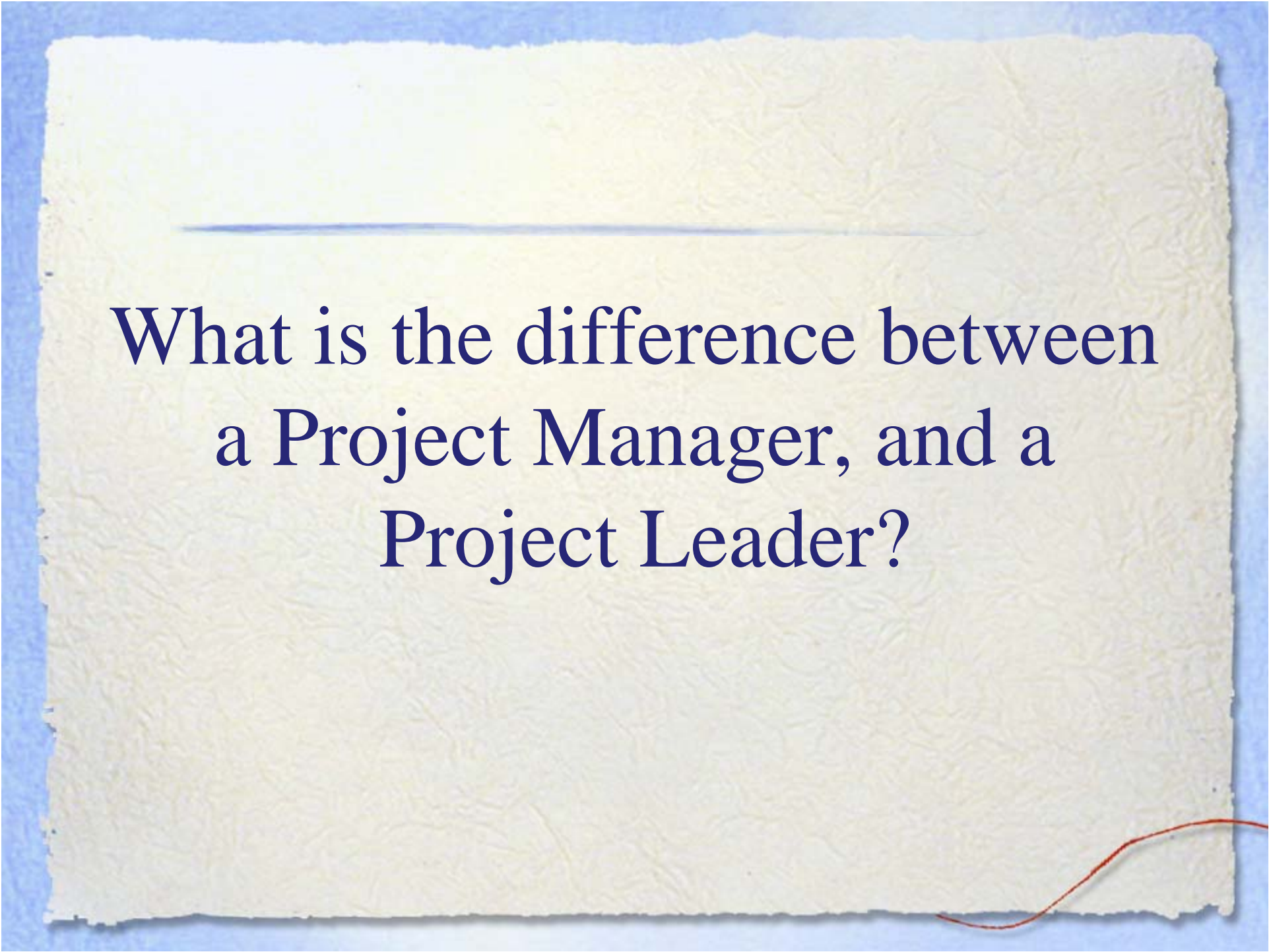to NASA's Success*

Because We Want Things
to be Right, Every Time!

Identifying Winning Project Managers

- **Desired Habits of Project Leaders**

-**Appreciating the "Soft" Side**

- **Characteristics of NASA Project Managers**

What is the difference between a Project Manager, and a Project Leader?

Differences Between Managers & Leaders

Kouzes & Posner, The Leadership Challenge

Managers Manage

Provide the vision

Maintain the status quo

Assist others to act

Monitor & control

Institutionalize the way

Leaders Lead

Create a shared vision

Challenge the status quo

Enable others to act

Encourage the heart

Model the way

Habits of NASA Project Managers

Habits of NASA Project Managers

Decisive
Delegates, delegates, delegates
People oriented
Well organized & prepared

Maintains a network

Regular meetings

Good negotiator
Tells the bad news
Presents clearly &
    concisely

Recognizes & rewards
Champions careers
Listens with respect
Celebrates success
Mindful of other's time
Open to dissenting opinions

Integrity
Honesty
Flexibility
Committed
Sense of humor

Habits of NASA Project Managers
Combined

Interesting Outliers Suggested

Penchant for action

Good sense of smell!

Doesn't chase rabbits

Knows the difference between gangrene, and amputation

Knows that 51% of being smart, is knowing what's dumb

The "Soft Side"
of NASA Project Managers

What is the *Soft Side*?
- The skills needed to lead one's self, and others

How are these skills identified?

- Emotional Intelligence
- Personality
- Ego Resilience
- Temperament
- …

Emotional Intelligence

Personal Competences

Self-Awareness
Knowing one's internal states, preferences, resources, and intuitions

Self-Regulation
Managing one's internal states, impulses, and resources

Motivation
Emotional tendencies that guide or facilitate reaching goals

Social Competences

Empathy
Awareness of other's feelings, needs, concerns

Social Skills
Adeptness at inducing desirable responses in others

Constructs That Inform the "Soft Side"

1. Personality - Meyers Briggs Type Indicator (MBTI)

2. Ego Resilience - Measure of Ego Brittleness (ER)

3. Temperament - Keirsey Temperament Sorter

1. Personality

"…much seemingly chance variation in human behavior, in fact is not due chance; it is the logical result of a few basic, observable preferences."

Isabel Briggs Meyers
A Guide to the Development and use of the Meyers Briggs Type Indicator

Personality Scales
Meyers Briggs Type Indicator (MBTI)

Extraversion ----------- **I**ntroversion

i**N**utuition ------------ **S**ensing

Thinking -------------- **F**eeling

Judging -------------- **P**erceiving

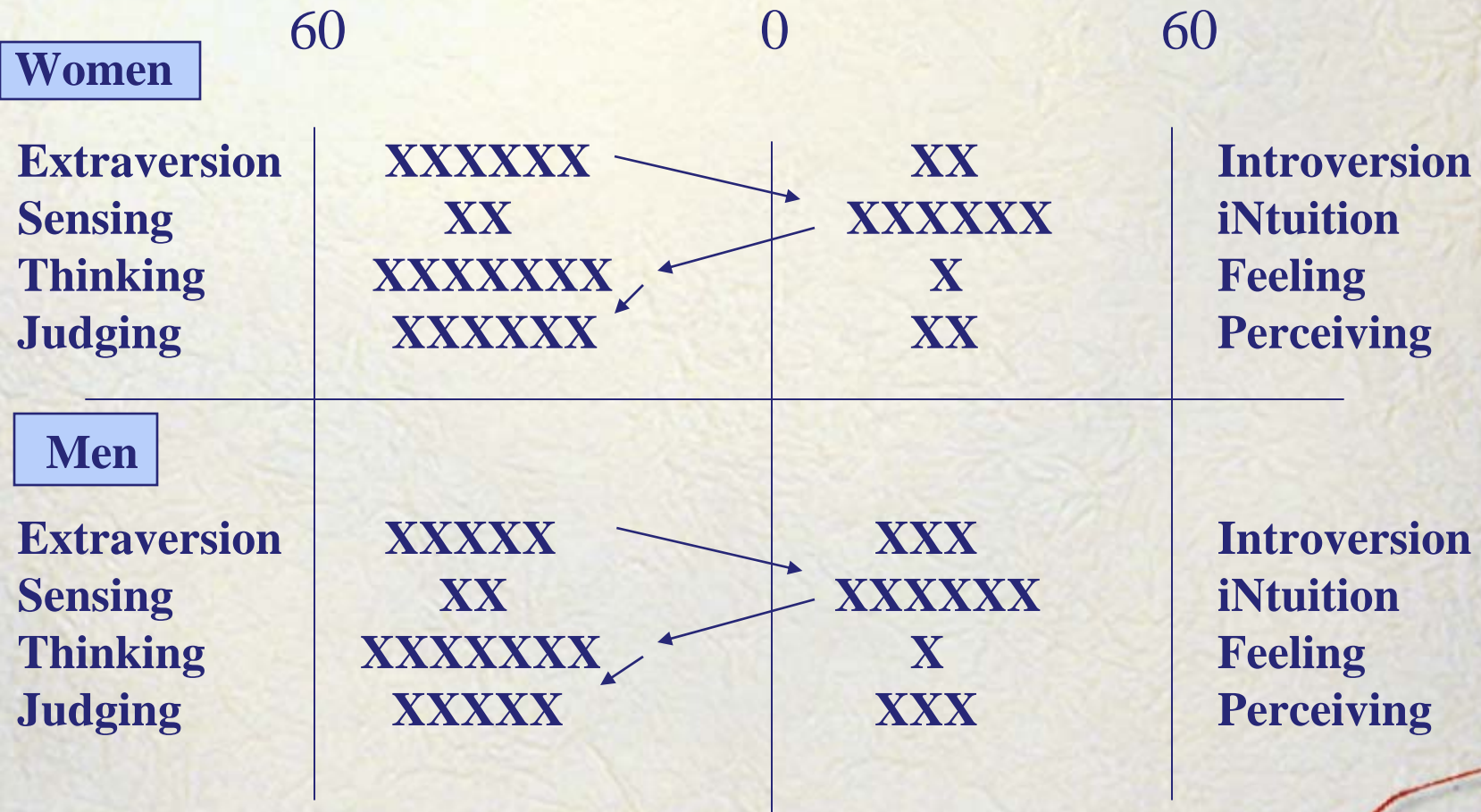# 16 PERSONALITY TYPES

ISTJ   ISFJ   INFJ   INTJ

ISTP   ISFP   INFP   INTP

ESTP   ESFP   ENFP   ENTP

ESTJ   ESFJ   ENFJ   ENTJ

Meyers Briggs Type Indicator (MBTI)
Project Manager Research Findings

	60	0	60

Women

Extraversion	XXXXXX	XX	Introversion
Sensing	XX	XXXXXX	iNtuition
Thinking	XXXXXXX	X	Feeling
Judging	XXXXXX	XX	Perceiving

Men

Extraversion	XXXXX	XXX	Introversion
Sensing	XX	XXXXXX	iNtuition
Thinking	XXXXXXX	X	Feeling
Judging	XXXXX	XXX	Perceiving

2. Ego Resilience
- A Measure of Ego Brittleness

"…ego resilience can be considered
a surrogate of emotional intelligence."

Daniel Goleman, Emotional Intelligence

Ego Resilience

Women

Mean 3.44

Men

Mean 3.31

tem·per·a·ment:
1. the combination of ***mental, physical, and emotional traits*** of a person; ***natural predisposition***

_____

Our brain has ***temperament for hardware*** (inborn), and ***character for software*** (experience in the environment)

Temperament is …our ***inclinations -*** our ***pre-disposition***

Character is …our ***habits -*** our ***disposition***

David Keirsey: Please Understand Me

16 PERSONALITY TYPES

ISTJ	ISFJ	INFJ	INTJ
ISTP	ISFP	INFP	INTP
ESTP	ESFP	ENFP	ENTP
ESTJ	ESFJ	ENFJ	ENTJ

4 TEMPERAMENT TYPES

SJs	- Most traditional	38% Of the population
SPs	- Most adventurous	38% of the population
NFs	- Naturally empathetic	12% of the population
NTs	- Most independent	12% of the population

Characteristics of NTs

NTs - are most independent   (intellectual & competent)

NTs - set very high standards   (demanding of selves & others)

NTs - see all possibilities   (visionary & excel at planning)

NTs - make impersonal decisions   (logically solve problems)

NTs - are naturally curious   (driven to acquire knowledge)

NTs - seek meanings in all things   (great innovators)

Well known NTs

ENTJs

Bill Gates
Margaret Thatcher
Douglas MacArthur
George Marshall
Napoleon Bonaparte

ENTPs

Walt Disney
Isaac Asimov
Alfred Hitchcock
John Lennon
Benjamin Franklin

Conclusions

"…*no one* is smart enough to predict
the behavior of a single human being…"

Steven Pinker, The Blank Slate

Questions / Comments